How not to miss a cancer: What can learning events (formerly SEA) tell us?

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Learning events (formerly SEA)

• For *individual and practice/PCN learning*
• Highlight areas for development *as individual and Practice*
• Identify gaps/weaknesses *in systems*
• Stimulate discussion and *reflection as a group/Network*
• Consider *particular types of presentation e.g emergency*
Factors influencing cancer survival and premature mortality
Updated NAEDI hypothesis

Age / Sex / Ethnicity / Socio-economic status*

Difficulty accessing primary care

Low public awareness / Barriers to help-seeking / Negative beliefs about cancer*

Delays in primary care interval

Late presentation to a GP / Low uptake of cancer screening

Access to diagnostics and primary-secondary care interface factors*

Late presentation to hospital services / Emergency presentations*

Delays in secondary care interval

More advanced disease at diagnosis

Treatment Access to treatment Other factors

Poor survival rates / Premature mortality

Avoidable deaths

*New or changed since original hypothesis

Service level factors Individual level factors
Difficulty accessing primary care

Delays in primary care interval

Access to diagnostics and primary-secondary care interface factors*

Delays in secondary care interval

Treatment Access to treatment
Other factors
Learning Events (SEA) - Overview

• What happened and why?
• What was the impact on those involved (patient, carer, family, GP, practice)?
• How could things have been different?
• What can we learn from what happened?
• What needs to change?
Learning Events (SEA) - Key Points

• Title and date of the SEA discussion and subsequent events
• Date the event was discussed and the roles of those present
• A description of the event involving the GP(s) and other colleagues
• Reflections on the event in terms of knowledge, skills and performance
• Safety and Quality Improvement
Learning Events (SEA) - Key Points

• Communication, partnership and teamwork
• Maintaining trust
• What changes have been agreed for me personally and the practice team, roles and agreed timelines for action(s)
• Changes carried out and their impact?
• How could things have been different?
• What can we learn from what happened?
• What needs to change?
Improving diagnosis of cancer

SIGNIFICANT EVENT AUDIT OF CANCER DIAGNOSIS

Cancer SEA Report Template

Diagnosis:
Date of diagnosis:
Age of patient at diagnosis:
Sex of patient:
Is the patient currently alive (Y/N)?
If deceased, please give date of death:
Date of meeting where SEA discussed:

N.B.: Please DO NOT include the patient’s name in any narrative

1. WHAT HAPPENED?

Describe the process to diagnosis for this patient in detail, including dates of consultations, referral and diagnosis. Consider for instance:

- The initial presentation and presenting symptoms (including where if outwith primary care).
- The key consultation at which the diagnosis was made.
- Consultations in the year prior to diagnosis and referral (how often the patient had been seen by the practice and for what reasons).
- Whether she had been seen by the Out of Hours service, at A&E or in secondary care clinics.
- If there appears to be delay on the part of the patient in presenting with their symptoms.

A TOOLKIT FOR GENERAL PRACTICE

E Mitchell, G Rubin & U Macleod

Royal College of General Practitioners
1. WHAT HAPPENED?

Describe the process to diagnosis for this patient in detail, including dates of consultations, referral and diagnosis and the clinicians involved in that process. Consider for instance:

- The initial presentation and presenting symptoms (including where if outwith primary care).
- The key consultation at which the diagnosis was made.
- Consultations in the year prior to diagnosis and referral (how often the patient had been seen by the practice; for what reasons; the type of consultation held: telephone, in clinic etc; and who - GP1, GP2, Nurse 1 - saw them).
- Whether s/he had been seen by the Out of Hours service, at A&E, or in secondary care clinics.
- If there appears to be delay on the part of the patient in presenting with their symptoms.
- What the impact or potential impact of the event was.

June 2014- Attended GP surgery concerned about aching right groin lump. GP1 referred to Surgeon for possible hernia. Surgeon diagnosed a few ‘a few shotty lymph nodes but no hernia’, which he didn’t think warranted a scan.¹

June 2014- Normal mammogram.

Nov 2014- Negative bowel cancer screening test.²

Dec 2014- Consultation with GP1 for Hypertension review and statin discussion for raised cholesterol, QRisk 19%.³

Feb 2015- Consulted with GP1 for weeping area in umbilicus. Diagnosed as Pyogenic Granuloma and cauterized with silver nitrate.

11th April 2015 – Consultation with GP2 for aching in left lower leg 2d after long haul flight. No clinical signs of DVT and Wells score -1. Muscle strain thought more likely. Counsellinged for signs of DVT and advised to raise concerns at BP check the following week and if worse would need scan to exclude DVT.⁴
1. WHAT HAPPENED?

Describe the process to diagnosis for this patient in detail, including dates of consultations, referral and diagnosis and the clinicians involved in that process. Consider for instance:

- The initial presentation and presenting symptoms (including where it occurred, primary care).
- The key consultation at which the diagnosis was made.
- Consultations in the year prior to diagnosis and referral (how often the patient had been seen by the practice, for what reasons; the type of consultation held: telephone, in clinic etc; and who - GP1, GP2, Nurse 1 - saw them).
- Whether s/he had been seen by the Out of Hours service, at A&E, or in secondary care clinics.
- If there appears to be a delay on the part of the patient in presenting with their symptoms.
- What the impact or potential impact of the event was.
Early Diagnosis of Cancer Significant Event Analysis Toolkit

Who is the toolkit for?
This cancer SEA toolkit and its resources support GPs, practice staff and commissioners in conducting high quality cancer SEAs with the aim of improving patient outcomes in the early diagnosis of cancer.

This toolkit may be used by CCG/Health Body or cancer leads, practice GP leads or any GP in practice delivering training and includes guidance for quality improvement across the primary secondary care interface.

If you are based in Wales or Scotland and interested in your practice taking part in the National Cancer Diagnosis Audit, please find out more and register here. Note that the audit in England has now closed.

Training resources for cancer/commissioning leads
Examples of SEAs with thematic analysis
Resources and guidance for training practice staff
Safety netting in primary care
Additional cancer risk assessment tools
Background and rationale
Training resources for cancer/commissioning leads

Examples of SEAs with thematic analysis

Resources and guidance for training practice staff

The **Cancer SEA GP guide** can be used by any GP wishing to undertake a Cancer SEA. The guide can also be issued as a 'hand-out' for GPs in your training events.

'E?arly Diagnosis of Cancer - Quality Improvement Using Cancer Significant Event Analysis' training session resources

The following resources consist of a presentation that can be adapted for your training events, and resources to support this:

- Cancer SEA training slides with trainer notes
- Cancer SEA session - lesson plan
- Example cancer SEA session agenda

Resources for training sessions:

- Cancer SEA Template (2016)
- Instrument feedback tool
- Workshop brief
- Example SEA – Patient A handout
- Example SEA – Patient B handout
- Example SEA – Patient C handout
- Example evaluation form

Safety netting in primary care
The role of primary care in cancer diagnosis via emergency presentation: qualitative synthesis of significant event reports

E D Mitchell¹, G Rubin², L Merriman³ and U Macleod⁴

Understanding diagnosis of lung cancer in primary care: qualitative synthesis of significant event audit reports
East Midlands Emergency presentation of lung cancer - SEA Thematic Analysis

- Common themes
- Divided into:
  - Tumour
  - Person
  - System
  - Diagnostics
  - Primary Care
  - Secondary Care
Tumour Themes

- No symptoms
- Anaemia
- Weight loss
- Neurological features:
  - ataxia, arm/facial weakness, seizure
- Breathlessness
- Pain
- Recurrent COPD exacerbations in the 6 months leading to diagnosis
Person Themes

- Nihilism and reluctance to “bother” G.P
  - Seizure 4 months before
  - Haemoptysis, saw pharmacist
- Stoic attitude rarely attend G.P
- Attribution of symptoms to another problem
- Attend AE
- Declining further investigations
  - Abnormal CXR
- Slow to represent after Investigations
- Frail with comorbidity
Community Themes

- Understanding of NICE referral guideline criteria
- What to do if CXR normal?
- Symptoms not always respiratory and meet referral criteria
- Pathway redesign
Presenting symptoms

- Loose stools
- Abdo pain
- PR bleeding
- Wt Loss
- Anaemia
- Poor appetite
- Constipation
- Tenesmus
- Tiredness
- Back pain
- Incontinence
- Abdominal Mass
- Anal pain
- Nausea
- Vomiting
- Epigastric pain
- Blue discoloration in fingers
- Cough
- Falls
- Cold hands
- Paraesthesia
- Generally unwell

Significant Event Analysis of Lung and Colorectal Cancer in Hull (and safety netting!)
A pie chart showing the referrals of patients diagnosed with bowel cancer.

- **2ww colorectal**
- **Urgent colorectal**
- **Routine colorectal**
- **Private**
- **2ww upper GI**
- **Emergency admission**
- **2ww gynaecology**

**Significant Event Analysis of Lung and Colorectal Cancer in Hull (and safety netting!)**

Royal College of General Practitioners

Cancer Research UK
<table>
<thead>
<tr>
<th>Learning point</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety netting is important when managing patients with red flag symptoms, arranging investigations and sending referrals</td>
<td>39</td>
</tr>
<tr>
<td>Know the NICE guidelines on the recognition and referral of cancer and the red flags</td>
<td>26</td>
</tr>
<tr>
<td>Have a robust system for dealing with the results of investigations</td>
<td>17</td>
</tr>
<tr>
<td>A careful examination should be undertaken and documented in patients presenting with abdominal symptoms</td>
<td>15</td>
</tr>
<tr>
<td>Patients presenting multiple times with similar symptoms should be monitored</td>
<td>6</td>
</tr>
<tr>
<td>Have a low threshold for investigating patients who present infrequently</td>
<td>6</td>
</tr>
<tr>
<td>Patients with significant comorbidities, may present late or have new symptoms labelled as part of their existing disease</td>
<td>6</td>
</tr>
<tr>
<td>Investigate patients with iron deficiency anaemia and know the local referral pathway</td>
<td>4</td>
</tr>
<tr>
<td>Good communication with secondary care can improve diagnosis times</td>
<td>3</td>
</tr>
<tr>
<td>Do not be reassured by normal blood results when a diagnosis of colorectal cancer is suspected</td>
<td>3</td>
</tr>
<tr>
<td>Ensure patient contact details are correct when organising investigations and referrals</td>
<td>2</td>
</tr>
</tbody>
</table>
Presenting complaint

Significant Event Analysis of Lung and Colorectal Cancer in Hull (and safety netting!)

RCGP Royal College of General Practitioners

CANCER RESEARCH UK
Key Lung Cancer Learning Point

• 37 (31%) patients had a first CXR which was negative for lung cancer.

• A negative CXR significantly increased median time to diagnosis with a fivefold increase in time to referral.

• A detailed review of cases showed that negative CXRs seemed to divert the GPs attention away from the possibility of lung cancer with multiple trials of treatments, routine referrals and referrals to other specialities being made.
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<td>Safety netting is important when managing patients with red flag symptoms, arranging investigations and sending referrals</td>
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<td>Have a low threshold for requesting chest x-rays, particularly in current or ex-smokers</td>
<td>34</td>
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<td>Know the NICE guidelines on the recognition and referral of cancer and the red flags</td>
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<td>Patients presenting multiple times with similar symptoms should be monitored</td>
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<td>Have a robust system for dealing with the results of investigations</td>
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<td>Be aware that chest x-rays can be negative even in patients with cancer</td>
<td>14</td>
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<td>Patients presenting to A&amp;E or OOH should be monitored and reviewed as needed</td>
<td>11</td>
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<td>Have a low threshold for investigating patients who present infrequently</td>
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<td>A careful examination should be undertaken and documented in patients presenting with chest signs</td>
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<td>Have a system in place to monitor investigations that have been requested and to chase up patients who do not attend</td>
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<td>Good communication with secondary care can improve diagnosis times</td>
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<td>Document and record smoking status in patients presenting with chest symptoms</td>
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<td>Patients with significant comorbidities, may present late or have new symptoms labelled as part of their existing disease</td>
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NATIONAL CANCER DIAGNOSIS AUDIT
Benefits OF NCDA

• Highlighting and evidencing good practice – *what do we do well?*
• Identifying diagnostic challenges at practice level – *where could we improve?*
• Enabling targeted quality improvement activity, leading to more efficient and effective pathways to diagnosis and improved patient experience and outcomes.
• Demonstrating quality improvement for GP appraisal, revalidation and inspection.
• Strengthen local and regional cancer intelligence.
• Help in the development and delivery of transformed cancer services, and implementing cancer national policies and standards.
• Large national dataset enables research, incl. into avoidable delays and pathways for patients with vague symptoms and rare cancers.
NCDA 2014 (SCOTLAND)

- GPs refer promptly (65.3% of patients referred to a specialist after fewer than three consultations)
- Nearly two thirds of patients (65%) had an investigation ordered by primary care before a referral was made, the majority of these were blood tests
- Half of patients diagnosed as emergencies (51%) had seen their GP in the same episode of illness, but 40% had not
- GPs felt that one in four patients (24.5%) had experienced an avoidable delay on their pathway to cancer diagnosis

Information Services Division NHS Scotland (2018) NCDA Scotland National Report
Impact – NCDA 2014

• The audit:
  • Provided opportunities for targeted review and reflective learning.
  • Identified avenues for quality improvement activity.
  • Generated detailed insights into pathways to cancer diagnosis.
  • Provides a baseline for future audits of the impact of new cancer referral guidelines.

• Participating practices received tailored feedback reports and several practices made changes and undertook quality improvement activities based on audit findings.

• Most QI activity focused on:
  • Referral behaviours
  • Safety netting protocols
  • Bowel screening uptake

“The practice reports produced were excellent and a valuable tool for discussion at both practice and cluster level. We aim to repeat the audit again for all of our cluster practices.” (GP, Glasgow)

“It completing the audit really helped shine a light on the whole patient journey and where things could be improved for the better.” (GP, Aberdeen)

• Regional reports were also made available were possible\(^1\) for NHS Boards & Networks

\(^1\)Regional reports were only issued with aggregated data from 10+ practices to ensure practices cannot be identified

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NATIONAL CANCER DIAGNOSIS AUDIT

KEY FINDINGS - NORTH OF SCOTLAND CANCER NETWORK
(with national comparator values provided in brackets)

The National Cancer Diagnosis Audit (NCDA) combined primary and secondary care data for patients diagnosed with cancer in 2014 to better understand patient pathways to diagnosis and, ultimately, improve clinical care and early diagnosis of cancer.

PLACE OF PRESENTATION
Place where the patient first presented with symptoms ultimately attributed to cancer
- At the GP surgery 64% (65% nationally)
- GP home visit 5% (7%)
- A&E 3% (49%)
- Outpatient clinic 5% (5%)
- Other places 10% (6%)

CONSULTATIONS
Number of consultations in primary care before referral
- <3 fewer than 3 consultations 63% (65%)
- ≥3 3 or more consultations 25% (20%)

TYPES OF INVESTIGATIONS
Primary-care led investigations ordered prior to referral
- Blood test 46% (37%)
- Imaging 22% (19%)
- Urinary test 2% (2%)
- Endoscopy 2% (3%)

TYPES OF REFERRALS
Type of referral that led most directly to a diagnosis of cancer
- USC Urgent Suspected Cancer 37% (37% nationally)
- Routine 11% (10%)
- Urgent (non-cancer) 12% (5%)
- Screening 5% (6%)
- Emergency 19% (20%)
- Private 7% (1%)

Out of a total of: 73 GP PRACTICES and 2,014 PATIENTS nationally
27 GP PRACTICES from the North of Scotland Cancer Network area submitted data on 718 PATIENTS to the NCDA
EMERGENCY DIAGNOSES
Of those patients diagnosed through emergency routes (19%), the proportion of patients referred by different emergency routes was

- **43%** (42%) NO PRIOR GP CONSULTATIONS
- **48%** (55%) PRIOR GP CONSULTATION(S)

Referral as emergency
- **Patient self-referred** 9% (14%)
- **Referral as emergency by GP** 34% (25%)

Referred as emergency by GP 12% (15%)

**PRIMARY CARE**
42% (40%)

- **Appointment** 5% (7%)
- **Clinical Appraisal** 19% (14%)
- **Test requested/ performance** 23% (23%)
- **Test result/reporting** 7% (6%)

**SECONDARY/ TERTIARY CARE**
40% (39%)

- **Referral** 17% (13%)
- **Delayed follow-up** 8% (6%)

**NOT AVOIDING TESTS/ REFERRAL**

- **Seen by GP previously during same episode of illness but no test/referral arranged** 33% (33%)

**AVOIDABLE DELAYS**
Where avoidable delays occurred and the main reasons for their occurrence

- **15%** (20%) AVOIDING TESTS/REFERRAL
  Seen by GP previously during same episode of illness with test/referral arranged

NOT AVOIDING TESTS/REFERRAL

- **Patient self-referred** 3% (7%)
- **Patient self-referred** 2% (5%)

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PLANS for 2019 NCDA (SCOTLAND)

• Insights from NCDA 2014 have been used to change the model for the next audit
• Future audit to use **quarterly near real-time data collection** approach

Audit registration opens in Feb 2019 via online portal

Data collection begins with new cases being added each month

Interim reports issued to participating practices, NHS Boards and SCNs

One year of data capture complete

Tailored annual reports issued to participating practices, NHS Boards and SCNs


• Data for the next audit in Scotland will be collected during 2019/20 (from July 2019)
• All practices will receive tailored feedback reports
Registration for the next NCDA will open in June 2019
Data collection due to start from July 2019

How it works:

• GPs register with Information Services Division (ISD) Scotland by emailing the designated email address and completing a Confidential Data Release Form (CDRF)

• From July 2019 ISD will send practices data collection forms for eligible patients on a quarterly basis, which will prepopulated with data held about patients within the Cancer Registry

• For each patient, GPs review and complete a data collection form, providing information on key dates, symptoms, number of consultations, types of investigations, referral(s) and patient characteristics

• Once complete, the practice sends the completed form(s) back to ISD via secure NHS mail

• ISD will analyse the data and create tailored practice reports which will be shared with practices

• Support from CRUK facilitators & Macmillan GPs, and resources from CRUK and the RCGP, are available to support discussion of audit findings and planning of quality improvement activity
National Cancer Diagnosis Audit

Get involved

- English GP practices can now register for the National Cancer Diagnosis Audit 2019 using the link below. Scotland and Wales will open later this year.
- Scottish practices can register using the link below.

NCDA overview

What are the benefits?

How to do the NCDA
Quality Improvement: Screencasts

The National Audit of Cancer Diagnosis explores patient pathways through primary care to cancer diagnosis. It particularly focuses on the time from patient presentation to diagnosis, the use of investigations prior to referral, and the referral pathways for patients diagnosed with cancer. Tailored practice-level feedback is provided to participants, helping to evidence good practice and identify areas that may need improvement. This series of five screencasts looks at the quality improvement process and tools that can be helpful in achieving earlier diagnosis of cancer in your patients.
Process Mapping
This first screencast offers a background to the nature of quality improvement and its major components. It goes on to look at the process mapping tool, illustrating how it can be used for quality improvement.

Fishbone Diagram
This screencast looks at the use of a fishbone diagram, which is a quality improvement tool that can help to explore multi-factorial problems and their causes.

Driver Diagrams
This screencast looks at how driver diagrams can be used as a tool in the ‘plan and test’ part of the quality improvement wheel. They set out the relationships between a clear overall improvement aim, a hierarchy of drivers leading to it, and identify actions that can be taken to address these drivers.

PDSA 1
This screencast is the first example of how plan-do-study-act (PDSA) cycles can be used to implement a small-scale change and assess its impact on achieving the required goal.
FURTHER RESOURCES

• How to get involved with the NCDA
  www.cruk.org/ncda

• Practice support from a CRUK Health Professional Facilitator
  https://www.cancerresearchuk.org/health-professional/learning-and-support/tailored-help-for-gp-practices

• Contact: pawan.randev@nhs.net
Resource

- Behind the headlines

Cancer news

Your guide to the cancer science that makes the news.

Many women unaware of the link between alcohol and breast cancer
Wednesday 19 June 2019

Major study finds no link between night shift work and breast cancer
Wednesday 29 May 2019

Sleep apnoea possibly linked to cancer risk in women
Wednesday 22 May 2019

Drinking very hot tea linked with risk of 1 type of oesophageal cancer
Thursday 21 March 2019

Online tool helps men choose best prostate cancer treatment
"Cervical cancer could be eliminated in most countries by 2100," reports The Guardian.

The headline is prompted by a new study that predicted what might happen to cervical cancer over the next 50 years.

Most cases of cervical cancer are caused by the human papillomavirus (HPV), and there are effective vaccines that can protect people from contracting HPV.

It's hoped that the number of cases of cervical cancer will be greatly reduced in countries where the vaccine is widely used.

But vaccination rates are much lower in poorer parts of the world.

Also, while vaccination protects young people who have never come into contact with HPV, it does not treat established infections.